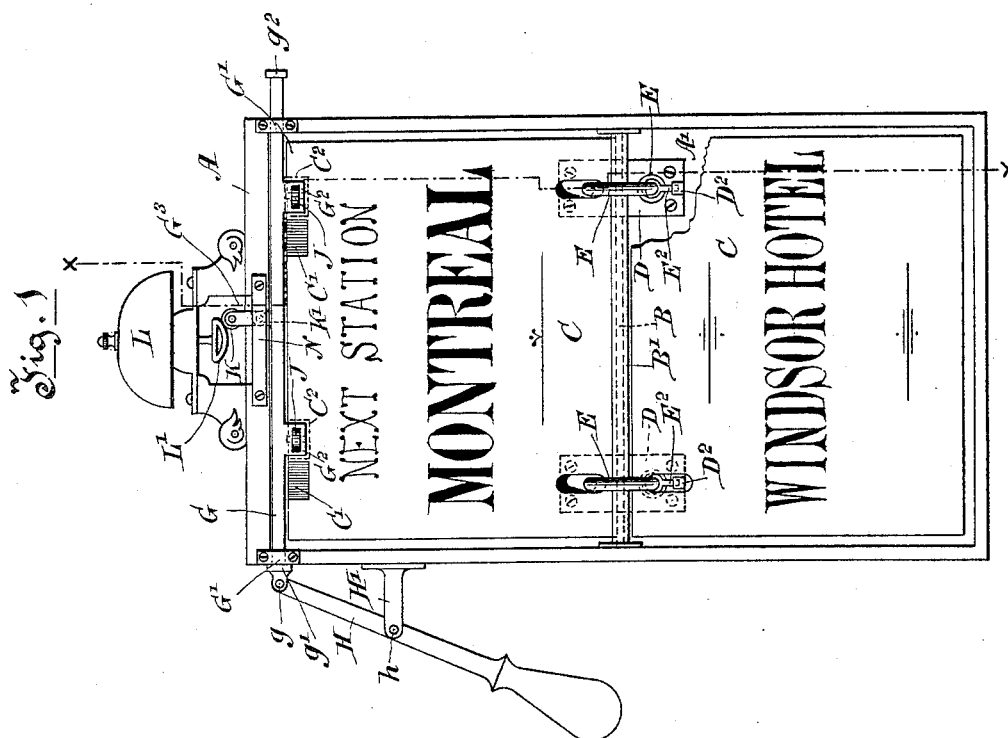
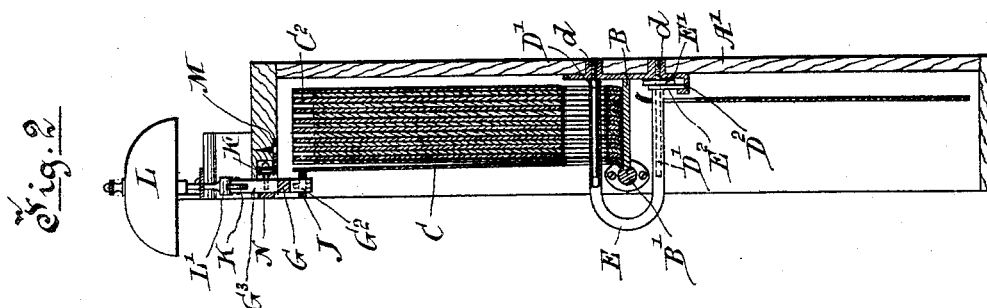


(No Model.)

J. R. MEADOWCROFT.
STATION INDICATOR.

No. 454,559.

Patented June 23, 1891.



Witnesses
Wm. W. Wane
Edw. J. Sears

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UNITED STATES PATENT OFFICE.

JOHN R. MEADOWCROFT, OF MONTREAL, CANADA, ASSIGNOR TO JOHN
WESLEY ALLISON AND HECTOR PREVOST, OF SAME PLACE.

STATION-INDICATOR.

SPECIFICATION forming part of Letters Patent No. 454,559, dated June 23, 1891.

Application filed October 9, 1890. Serial No. 367,562. (No model.) Patented in Canada November 21, 1890, No. 35,474.

To all whom it may concern:

Be it known that I, JOHN ROBERT MEADOWCROFT, of the city of Montreal, in the district of Montreal and Province of Quebec, Canada, have invented certain new and useful Improvements in Station-Indicators, (for which I have obtained Letters Patent of the Dominion of Canada, No. 35,474, granted November 21, 1890;) and I do hereby declare that the following is a full, clear, and exact description of the same.

This invention relates to the class of station-indicators for use in railway-trains, which have a series of cards or plates arranged in consecutive order loosely bound together at one edge and having notches in the opposite edge, such plates being held in position to display the name of a station at one time, and upon being released successively fall and present an advertisement on their opposite sides.

The invention has for its object to avoid complicity of mechanism, to improve the construction of certain parts, to render the operation of the device more certain, and provide means whereby the cards may be readily secured in place in the frame or removed therefrom.

The principal improvement is in the means for retaining and releasing the cards or plates successively, and this consists of a sliding bar with lugs or projections adapted to bear upon the faces of the cards, to hold them up, and to register with the notches, at other times to release and allow them to fall.

To avoid the possibility of the bottom edge of one plate becoming engaged with the edge of the one behind it in turning over, I have bent such bottom edges outward; and in order to render it an easy matter to lock the cards or plates in position in and remove them from the casing I secure two pins rigidly in the back of the casing, and fit on these a hollow staple on which the cards or plates are slipped, securing the staples in place by means of a button or like device, which can be turned to engage with a projection from the casing.

For full comprehension, however, of the invention, reference must be had to the annexed drawings, in which like symbols indicate corresponding parts, and wherein—

Figure 1 is a face view of the indicator; and

Fig. 2, a vertical section of indicator on line *x x*, Fig. 1.

A is the frame or casing similar to those now in use; B, a horizontal metal shelf located midway of its length, faced with a round rod B', and serving to support the cards or plates C when they are turned up or in their station-indicating position.

D D are two face-plates secured to the interior side of the back A' of the casing, and having bosses *d d* on their rear sides adapted to fit apertures in such back, and serving to furnish extra metal to provide seats into which pins D' D' can be screwed and project from such plates to within a short distance of the face of the casing.

E E are hollow staples, the legs of which can be fitted over the pins D' D', and one of such legs be provided with a collar E' to hold in place a button E², hung loosely on such leg, and which can be turned to engage with a right-angled ledge or projection D² on the plates D D, so as to hold the staples in place.

The cards or plates C are threaded upon the staples E E the same as formerly, except that the eyes are changed to slots *c* to give freer movement, and have their edges, which rest on the shelf B, bent outward, as shown in Fig. 2, so that any chance of the one that is falling down catching in the edge of the one behind it is avoided. The opposite or free edges of these cards or plates are notched in non-registering or alternate order, as usual, so that while the retaining device in one position will hold one card it must be moved to another position to hold the next one and free the first, C' C' being the notches in the front card, and the dotted lines C² C² indicate those in the one behind it.

The device for retaining and releasing these cards consists of a bar G, adapted to slide in the bearings G', secured on the faces of the side boards of the casing, and having lugs G² G² projecting from its under side at such a distance apart that they will coincide with the notches C' and C² when the bar is moved to left or right, as the case may be, this being preferably done by the lever H, pivoted at *h* in a bearing H', projecting from the side of the casing and connected at *g* with one end of the bar, suitably flanged, as at *g'*,

to regulate the movement of the bar in one direction, a cap g^2 on the other end determining the opposite movement of same.

Rollers J J are preferably mounted in the lugs $G^2 G^2$ to facilitate travel along the faces of the cards or plates C.

An arm G^3 projects up from the top side of the bar G at a point about centrally of its length and carries two rollers K K', respectively, at its upper end and on its inner side, the former serving to engage with a curved foot L' on the operating-rod of a signal-bell L of the Russell & Erwin type, so that in passing beneath same it will elevate such rod and cause the bell to sound, and the latter, running on a metal strip M, secured on the under side of the top of the casing, and serving to support the weight of the bar G in the center.

N is a guide-plate secured to the face of the top of the casing and serving to steady the bar G, the arm G^3 of which works between the plate and the casing.

What I claim is as follows:

1. In a station-indicator, the combination, with a series of cards arranged in consecutive order, loosely bound together at one edge and non-registering in parts, of a sliding locking-bar capable of offering one or more points of engagement with the cards, and a lever for operating said bar.

2. In a station-indicator, the combination, with a series of cards arranged in consecutive order, loosely bound together at one edge and having non-registering notches in another edge, of a sliding bar having one or more lugs

projecting in front of said cards so as to engage them at more than one point and for retaining and releasing them successively, and a lever for operating said bar, as set forth.

3. In a station-indicator of the kind described, the combination, with the staples E, shelf B, and rod B', of the series of cards arranged in consecutive order, loosely bound together at one edge by said staples, non-registering in parts, and having their bottom edges bent outward, as shown, and for the purpose set forth.

4. In a station-indicator of the kind described, the combination, with the series of cards arranged in consecutive order and non-registering in parts and with the back board of the casing, of pins rigidly secured to such back board, staples hollowed to fit over such pins and serving to bind said cards loosely together at one edge, and a locking device for securing such staples in place.

5. In a station-indicator of the kind described, the combination, with the series of cards arranged in consecutive order, loosely bound together at one edge and non-registering in parts, the sliding bar G, provided with two or more lugs projecting in front of said cards and having the arm G^3 , and the lever H, of a signal-bell having an operating-rod, the movement of which by said arm will cause the bell to sound, as set forth.

Montreal, 6th day of October, 1890.

J. R. MEADOWCROFT.

Witnesses:

P. JOHN WANE,
FRED. J. SEARS.